

# A Guide To Pigeon Guillemot Nest Sites



On South Marble Island, Glacier Bay, Alaska

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Pigeon Guillemot Nest Sites  
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South Marble Island,  
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By  
Stephani G. Zador

Alaska Biological Sciences Center  
U.S.G.S. Biological Resources Division  
1011 East Tudor Road  
Anchorage, AK 99503  
And  
College of Forest Resources  
University of Washington  
Seattle, WA 98195

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## INTRODUCTION

The pigeon guillemot (*Cepphus columba*) is a widely distributed seabird in the North Pacific and common in coastal waters of Alaska. Guillemots are abundant seabirds breeding in Glacier Bay, Alaska, but little is known about the status of their population.

This guide documents the location of guillemot nest sites on South Marble Island, which is an important seabird colony and Steller sea lion (*Eumetopias jubatus*) haul-out located in central Glacier Bay. The island has been closed to foot traffic for over 25 years to reduce disturbance to the breeding seabirds and the federally-protected Steller sea lions.

During the course of other research on South Marble Island, I photographed and monitored some accessible nest sites. This work was incidental to other research activities, and nest sites were checked as time allowed. To minimize disturbance to the breeding birds, nests were checked at most once per week during incubation and no more than once every two days during the chick-rearing stage. Some nest sites were checked only once.

Guillemots typically nest in crevices along rocky coastline. In this guide, a nest site is defined as a protected crevice or recess in which one or more guillemots, guillemot eggs, or guillemot chicks have been observed. It also includes crevices that resemble typical guillemot nest sites, but were not active this year. These sites are subjectively defined as a protected crevice or recess containing a flattened area, sometimes lined with small stones, suitably-sized for a guillemot nest.

I have produced this guide to document the status of pigeon guillemot nest sites on South Marble Island and to aid in the relocation of nest sites in future studies. Ultimately, this guide may serve as a template for a more complete guide to guillemot nest sites in Glacier Bay, as a repository of scientific data on this important population, and as a source of information for managing human activities near nest sites.

The guide is organized in three sections: (1) a map showing the general location of each nest in relation to other nests on the island, (2) photographs accompanied by verbal descriptions of each nest, and (3) summaries of guillemot breeding activity organized by nest number.

## NEST #1

### Site Description

Under a large rock above the landing cove on the southern end of the island (not on Small Marble).

Active in 1999



## NEST #2

### Site Description

At the lower end of the sloping crack on the northwest corner of Small Marble.

Active in 1999





## NEST #3

### Site Description

On upper end of the sloping crack on the northwest corner of Small Marble.

Not active in 1999



## NEST #4

### Site Description

In the small cave high on the northwest corner of Small Marble.

Active in 1999

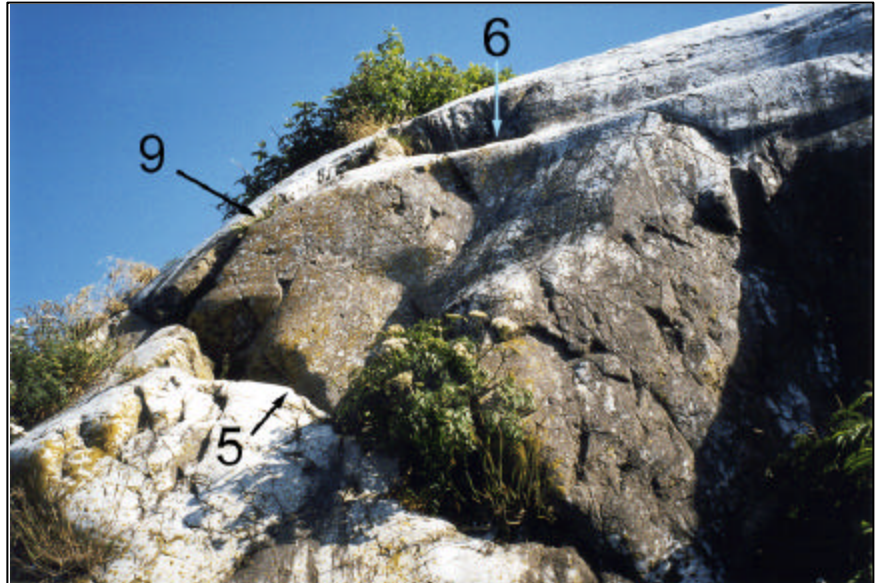


## NEST #5

### Site Description

On the west side of Small Marble. Below the large hole and on the right end of the small ledge

Active in 1999



## NEST #6

### Site Description

At the bottom of the large hole on the west side of Small Marble. Looking down into the hole, the nest is on the lower right side.

Active in 1999



## NEST #7

### Site Description

In the small opening on the east side of the rock between South Marble and Small Marble.

Active in 1999



## NEST #8

### Site Description

Near the elderberry bushes in the shelf halfway up the tall sloping face which is directly below the campsite.

Active in 1999



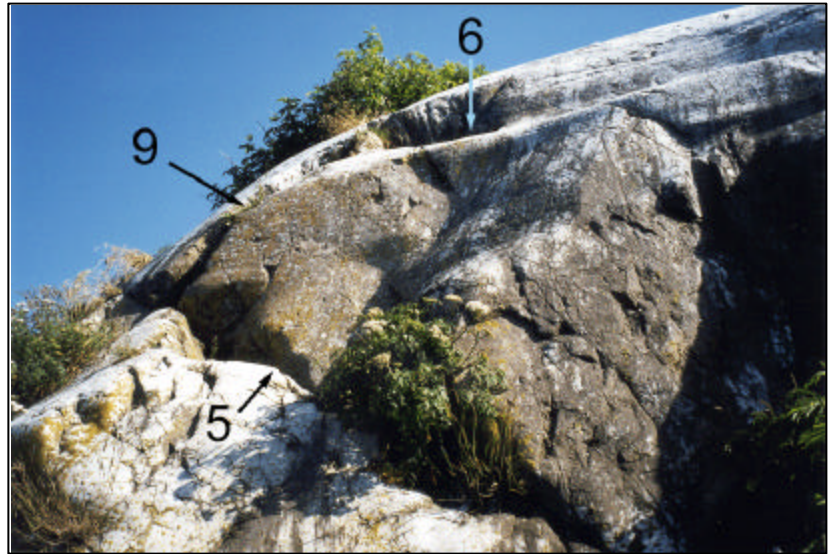


## NEST #9

### Site Description

On the west side of Small Marble, just below and to the north of the large hole where nest #6 is located. The nest is in a small vertical crack.

Active in 1999

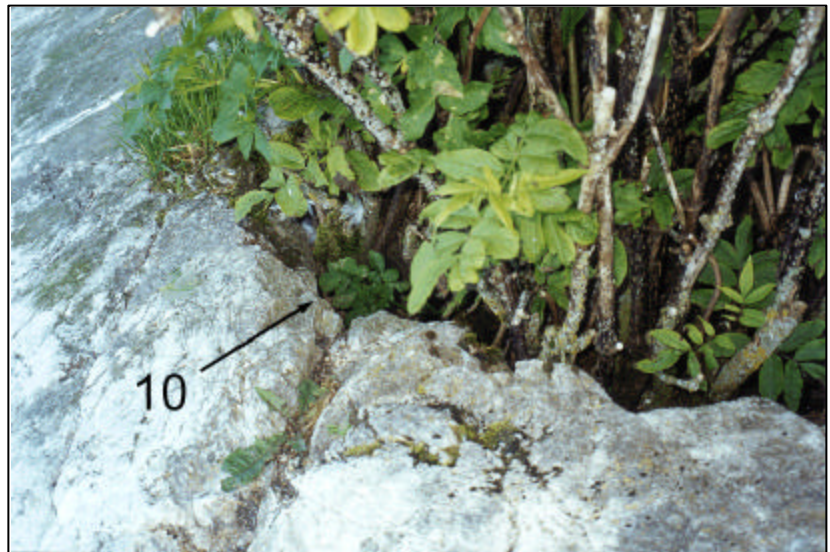


## NEST #10

### Site Description

On Small Marble, at the northern end of a depression in the rock in which a patch of elderberries grows. The patch is the second above the hole on the west side (nest #6).

Active in 1999



## NEST #11

### Site Description

On the south side of the first gully north of the cooking area. Under a large rock above the first ledge, the last rocky area before the cliff becomes mostly vegetated.

Not active in 1999



## NEST #12

### Site Description

A small ledge set in the rock at the base of the first gully north of the cooking area

Not active in 1999





## NEST #13

### Site Description

A short distance up the gully from nest #12. Beneath a pile of rocks. Nest contents can be seen through a small hole directly above the nest site. Cannot reach chicks.

Active in 1999

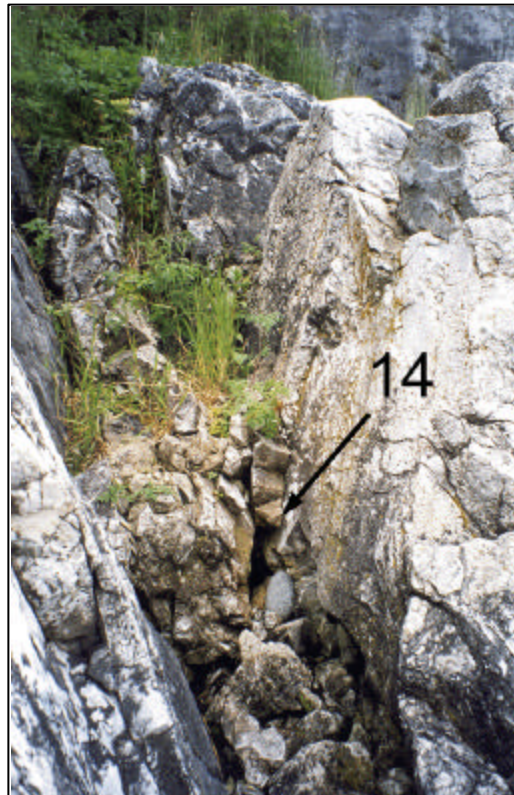


## NEST #14

### Site Description

In the second gully north of our cooking area.

Active in 1999



## NEST #15

### Site Description

In Guillemot Meadows area. At base of vertical cliff on southern end. Adult visible through hole above nest site. Cannot be reached for chicks.

Active in 1999

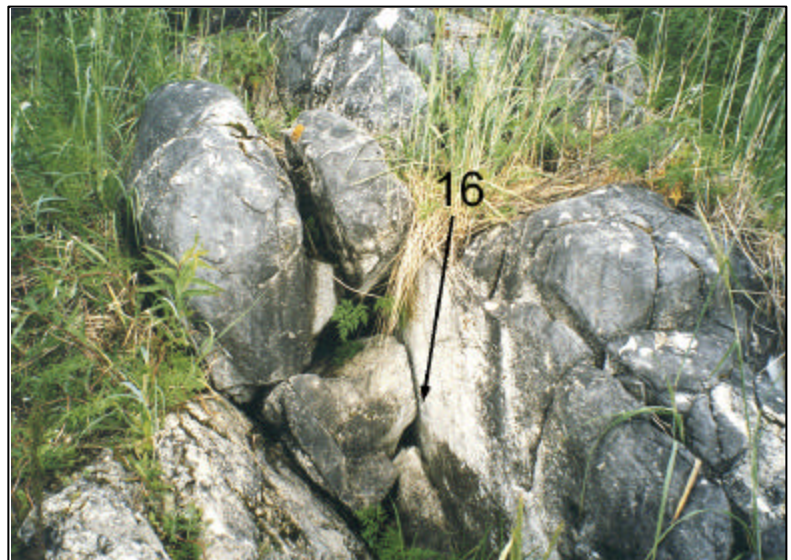


## NEST #16

### Site Description

In Guillemot Meadows area. In second small gully north of the talus and slate intrusion. Nest is in a vertical crack. Chicks can sometimes be reached, but can move deep into the back of the recess.

Active in 1999





## NEST #17

### Site Description

In the Guillemot Meadows area. Nest is in crack in the rounded rock "Guillemot Condos" on a raised portion of the smooth rock of the area.

Active in 1999



## NEST #18

### Site Description

Under small free-standing rock at the north end of the Guillemot Meadows area. Nest visible from a distance.

Active in 1999



## NEST #19

### Site Description

In the talus gully in the second major seep north on South Marble. Next major seep north of the Guillemot Meadows seep area. Could not find nest. Adult flew out from underneath the talus.

Active in 1999



## NEST #20

### Site Description

At the northwest corner of the island, south of the northern peninsula. Nest under a large flat rock.

Active in 1999



## NEST #21

### Site Description

At the south end of the grassy strip at the base of the northern peninsula. About 4 meters up a talus slope, on the right side.

Active in 1999

## NEST #22

### Site Description

On the First Ridge of the northern peninsula. Beneath a small rock wedged at the top of a gully crack.

Active in 1999

## NEST #23

### Site Description

On the First Ridge of the northern peninsula At the shrubby base of a 1 meter rounded ledge

Active in 1999.

## NEST #24

### Site Description

On the First Ridge of the northern peninsula. In a small vertical opening at the base of a crack on the northern end of this area.

Active in 1999

## NEST #25

### Site Description

On the First Ridge of the northern peninsula..

Below a large rock at the west side of a 1 meter deep depression

Active in 1999

## NEST #26

### Site Description

On the northern peninsula.

In the long horizontal crack which runs almost the length of the west side of the peninsula north of the First Ridge

Active in 1999.





## NEST #27

### Site Description

On the northern peninsula. In the long horizontal crack which runs almost the length of the west side of the peninsula north of the First Ridge.

Active in 1999



## NEST #28

### Site Description

On the northern peninsula. In the long horizontal crack which runs almost the length of the west side of the peninsula north of the First Ridge. Behind a small rock in the crack.

Active in 1999



## NEST #29

### Site Description

On the northern peninsula. At the northern end of the long horizontal crack which runs almost the length of the west side of the peninsula north of the First Ridge. Nest is in a vertical crack in the downward slope

Active in 1999



## NEST #30

### Site Description

On the northern peninsula. Under a large rounded rock above the long horizontal crack which runs almost the length of the west side of the peninsula north of the First Ridge. Above nest #26.

Active in 1999





## NEST #31

### Site Description

South of the first gully north of the cooking area. Directly south of nest #11. Above the horizontal ledge filled with shrubs and fireweed.

## NEST #32

### Site Description

In the first wide grassy gully immediately south of the northwest corner of South Marble. Under a large boulder in the rye grass.

Active in 1999



## NEST #33

### Site Description

South of nest #32. South of northwest corner of South Marble. Under boulder in vertical crack.

Active in 1999



# ACTIVITY AT NEST SITES

## NEST #1

1999: Two eggs laid between 6/5-10; two chicks hatched between 7/7-14.

## NEST #2

1999: First egg laid between 6/16-19; two eggs last seen on 7/16.

## NEST #3

1999: No eggs seen 6/1 to 7/16.

## NEST #4

1999: Two eggs laid between 6/19-29; two eggs last seen 7/16.

## NEST #5

1999: First egg laid between 6/16-19; two eggs disappeared between 6/29 and 7/6.

## NEST #6

1999: First egg laid between 6/9-11; two chicks last seen on 7/16.

Note: There is a decomposed body of an adult pigeon guillemot at the bottom of the hole, at the opposite end from the nest.

## NEST #7

1999: Two adults attended the site regularly until approximately 6/21. No eggs seen.

## NEST #8

1999: Two pairs of guillemots were seen regularly emerging from this area throughout our stay on the island. We were never able to find a nest.

## NEST #9

1999: The first egg was laid between 6/13-15; two eggs disappeared between 6/19-29.

## NEST #10

1999: Two eggs laid on or before 6/24; two chicks hatched between 6/29 and 7/15; both chicks disappeared between 7/16-19.



NEST #11

1999: No eggs seen

NEST #12

1999: No eggs seen

NEST #13

1999: Adult guillemot on nest during most checks; adult seen with 2 hatched egg shells 7/16; one or more chicks seen 7/20.

NEST #14

1999: Adult on nest 6/30; one egg seen 7/6; one eggs last seen 7/20.

NEST #15

1999: Adult on nest during all checks: 6/30, 7/6, 7/14, and 7/20

NEST #16

1999: Two eggs laid before 6/30; one or more chicks heard 7/6; two chicks seen 7/14; one or more chicks last heard 7/20.

NEST #17

1999: At least one egg laid before 6/30; adult last seen on nest 7/14; egg(s) disappeared before 7/20.

NEST #18

1999: Adult on nest 6/30; one egg seen 7/6; nest contents disappeared between 7/6-14.

NEST #19

1999: Site attended on 7/6.

NEST #20

1999: Two eggs laid before 7/6; eggs disappeared between 7/14-16.

NEST #21

1999: Two eggs laid before 7/6; two eggs at last check on 7/20.

NEST #22

1999: Two eggs laid before 7/6; Two chicks hatched between 7/6-14; two chicks seen on last check on 7/20.

NEST #23

1999: Two eggs laid before 7/6; only one chick seen at next check on 7/16; one chick seen on last check on 7/20.

NEST #24

1999: One egg seen 7/6; two chicks hatched before 7/14.

NEST #25

1999: Two chicks hatched before 7/14; only one chick found on last check on 7/20.

NEST #26

1999: Two eggs laid before 7/6; two eggs when last checked on 7/20.

NEST #27

1999: Two eggs laid before 7/6; Two chicks hatched between 7/6-14; two chicks when last checked on 7/20.

NEST #28

1999: Two chicks found 7/14; two chicks when last checked on 7/20.

NEST #29

1999: Two chicks found 7/14; two feathered chicks when last checked on 7/20.

NEST #30

1999: One egg and one new chick on 7/14; nothing seen on subsequent checks.

NEST #31

1999: One or more chicks heard 7/17; one dead egg seen on 7/16; fresh poop but could not see chick on last check on 7/20.

NEST #32

1999: One egg laid on or before 7/16; one egg when last checked on 7/20.

NEST #33

1999: Two chicks found on 7/20.